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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/779,333

02/16/2004

Gerhard Weiss

140-106

5230

7590

02/17/2006

David M. Hill
Ward & Olivo
708 Third Avenue
New York, NY 10017

EXAMINER

WELLS, NIKITA

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/779,333	WEISS ET AL.	
	Examiner	Art Unit	
	Nikita Wells	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant canceled claims 1-15 and added new claims 16-35 as per the "Amendment" received September 19, 2005.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 16-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,693,276 B2. Although the claims of the application are not identical to the claims of the patent, the claims are not patentably distinct from each other and claim common subject matter disclosing an apparatus

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and method for producing ion packages with a predetermined velocity using a system filled with damping gas consisting of coaxially arranged apertured diaphragms into which the ion beam is injected in line with the axis, and with consecutive phases of a low-frequency traveling field voltage applied to the diaphragms, wherein the low-frequency traveling field voltage consists of at least four consecutive phases and wherein a two-phase RF voltage is superimposed periodically on the phases of the traveling field voltage.

Claims 16-19, 26, and 31 of the application are very similar to claims 1, 4-5, and 13 of the patent. Claims 24-25 of the application are very similar to claims 1, 6, and 14 of the patent. Claims 34 and 20 and 35 of the application are very similar to claims 13 and 15 of the patent, respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over J. Franzen (5,818,055) in view of Bateman et al. (6,794,641 B2).

With respect to claims 16-19, 21, 26, and 31, J. Franzen discloses (Abstract; Figs. 1 and 3; claim 1; and Col. 3, lines 7-30, and Col. 5, 22-32) an ion packet injector comprising: an ion source (not shown) for producing ions; a mass analyzer (5-7)(in this case in the form of an ion trap); and a traveling field device (2) for transporting ions along a path from said ion source to said mass analyzer (5-7), said device having a traveling field voltage applied to at least a part of

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said device (2). With respect to claims 20, 22-25, 30, and 32-35, J. Franzen discloses (Col. 3, lines 7-30) the traveling field device (2) wherein said traveling field voltage has an even number of rotational phases having equal angle of rotation spacings, and wherein an RF voltage is superimposed over said traveling field voltage, and the RF voltage can be a two-phase RF voltage (Col. 3, lines 20-24). With respect to claim 23, J. Franzen discloses (Col. 3, lines 30-31) the traveling field device (2) wherein a damping gas is provided to reduce oscillations of the ions in said device.

With respect to claims 27-29, J. Franzen fails to disclose that the ion packet injector comprises a pulser for packaging said selected ions, wherein said injector further comprises an ion reflector for reflecting ions received from said pulser onto a path toward the ion detector.

However, Bateman et al. disclose (Fig. 4; Col. 21, line 60 to Col. 22, line 17; and Col. 25, lines 32-42) a mass spectrometer, wherein said mass spectrometer further comprises an ion reflector (inside 14) for reflecting ions received from said pulser (14) onto a path toward the ion detector.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to recognize and substitute the mass spectrometer of Bateman et al. into the device for injection of ions into an ion trap of J. Franzen in order to facilitate the transport and injection of ion packets into a mass spectrometer incorporating optimum axial focusing with minimal ion loss.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Nikita Wells". The signature is fluid and cursive, with the first name "Nikita" and the last name "Wells" clearly distinguishable.

Nikita Wells

Primary Examiner, Art Unit 2881

February 10, 2006